

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P563873

Luminaire Tested: **LD4C55D010 EX4C559030 4LBSQLWWLI**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P563873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P219529)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C55D010 EX4C559030 4LBSQLWWLI
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH LI FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

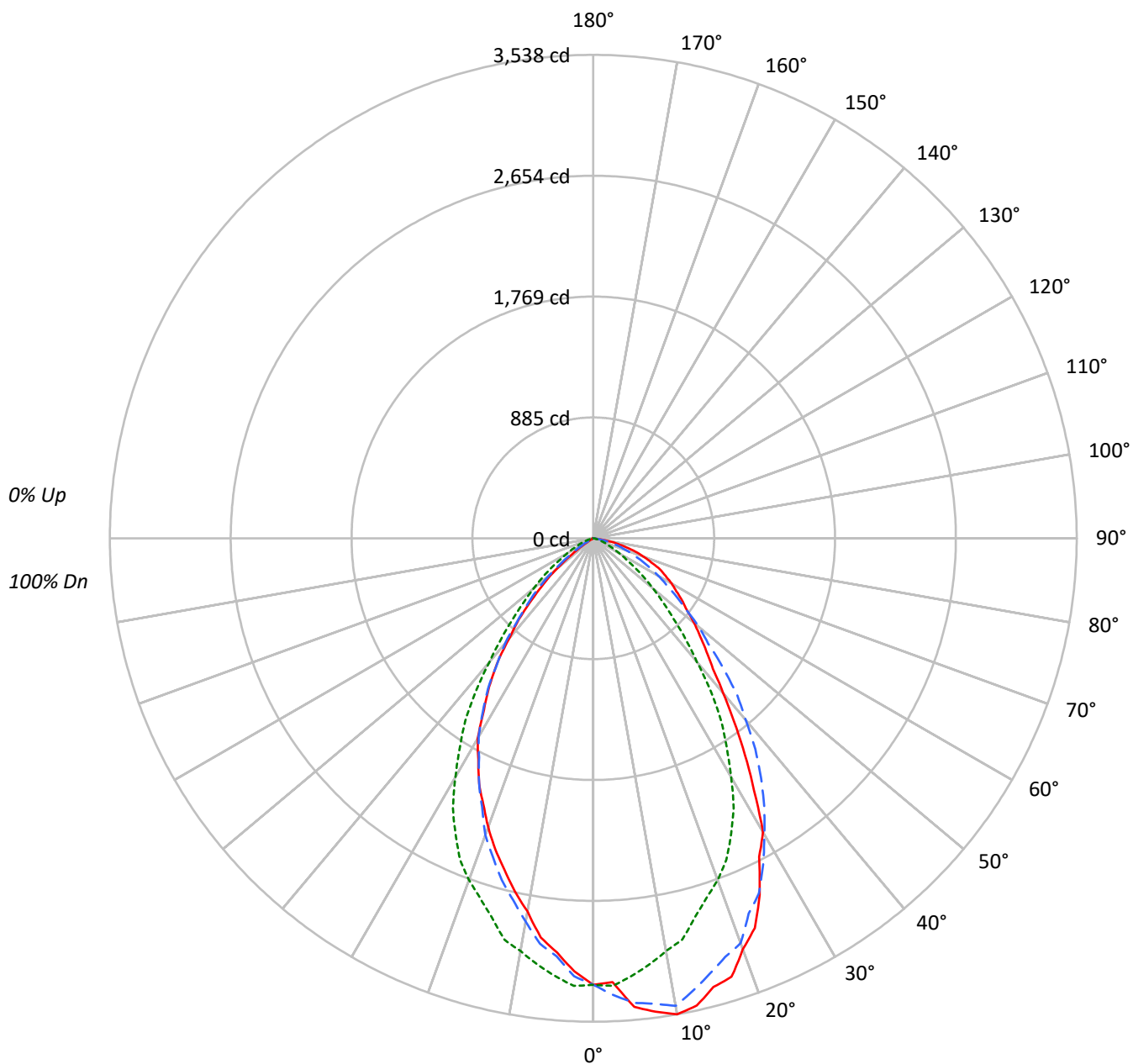
Lumens per Lamp: N/A
Luminaire Lumens: 4683.2 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80		
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72		
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64		
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58		
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	54	53		
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48		
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44		
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41		
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	315239	315239	315239
5°	333519	311523	294834
10°	346595	300546	271740
15°	339665	286842	250840
20°	328642	273132	230889
25°	306552	253980	210628
30°	276723	224781	188560
35°	227950	192424	156438
40°	186039	148516	120403
45°	159831	112808	86595
50°	144661	85863	54700
55°	133132	61940	19783
60°	127771	42320	3030
65°	123403	28630	913
70°	110504	19889	1128
75°	90554	10252	0
80°	56621	4334	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.1	6.5
10°-20°	824.7	17.6
20°-30°	1101.2	23.5
30°-40°	1045.4	22.3
40°-50°	722.6	15.4
50°-60°	399.3	8.5
60°-70°	198.3	4.2
70°-80°	78.1	1.7
80°-90°	7.4	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2232.1	47.7
0°-40°	3277.5	70.0
0°-60°	4399.4	93.9
0°-90°	4683.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3267	3267	3267	3267	3267	
5°	3443	3412	3216	3071	3044	330
15°	3400	3299	2872	2590	2511	962
25°	2879	2868	2386	1978	1978	1313
35°	1935	2139	1634	1344	1328	1212
45°	1171	1344	827	678	635	914
55°	791	744	368	188	118	712
65°	540	392	125	4	4	525
75°	243	149	28	0	0	259
85°	0	4	0	0	0	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1
2.5°	3251.5	3341.5	3349.3	3341.5	3353.4	3349.3	3369.0	3349.3	3373.0	3337.7	3345.6
5°	3443.4	3408.1	3482.6	3443.4	3443.4	3439.6	3427.8	3423.8	3439.6	3388.7	3412.1
7.5°	3494.4	3545.3	3612.0	3529.7	3533.5	3533.5	3510.1	3502.2	3502.2	3408.1	3435.6
10°	3537.5	3506.1	3541.4	3510.1	3537.5	3533.5	3549.2	3498.3	3533.5	3478.7	3474.8
12.5°	3502.2	3490.4	3537.5	3486.6	3470.9	3474.8	3455.2	3443.4	3455.2	3392.5	3388.7
15°	3400.3	3412.1	3482.6	3427.8	3419.9	3412.1	3388.7	3349.3	3380.9	3294.6	3298.6
17.5°	3365.2	3345.6	3357.4	3310.3	3322.1	3314.2	3310.3	3275.1	3267.1	3212.3	3212.3
20°	3200.6	3243.6	3243.6	3212.3	3212.3	3208.5	3157.5	3188.8	3153.5	3137.9	3153.5
22.5°	3086.9	3090.9	3090.9	3063.4	3067.5	3051.8	3024.3	3004.6	3024.3	3004.6	2973.4
25°	2879.4	2887.2	2934.2	2883.3	2875.4	2891.1	2867.6	2855.8	2851.9	2804.9	2867.6
27.5°	2628.6	2706.9	2703.1	2683.4	2706.9	2675.6	2663.9	2667.8	2679.6	2675.6	2691.2
30°	2483.7	2495.4	2507.2	2491.5	2495.4	2483.7	2483.7	2487.6	2518.9	2507.2	2503.2
32.5°	2189.8	2229.0	2260.4	2260.4	2264.3	2276.1	2272.1	2354.4	2374.0	2334.9	2327.0
35°	1935.2	1962.7	1990.1	1994.0	2045.0	2048.7	2052.8	2076.3	2131.0	2142.8	2138.9
37.5°	1692.4	1719.7	1727.5	1762.8	1790.4	1817.6	1849.1	1880.4	1927.4	1966.6	1947.0
40°	1477.0	1488.6	1508.2	1523.9	1578.7	1578.7	1594.4	1657.1	1708.1	1739.4	1735.3
42.5°	1296.7	1300.6	1316.3	1343.7	1394.7	1382.9	1394.7	1437.8	1512.1	1516.0	1559.2
45°	1171.3	1167.3	1179.1	1183.0	1214.4	1230.1	1237.9	1269.3	1331.9	1339.8	1343.7
47.5°	1057.8	1053.8	1073.5	1081.3	1092.9	1108.5	1108.5	1112.6	1136.0	1155.7	1140.1
50°	963.7	963.7	963.7	971.5	991.2	987.2	991.2	1006.8	1018.5	1010.7	1006.8
52.5°	861.8	877.4	889.2	893.2	897.1	897.1	901.0	893.2	889.2	877.4	853.9
55°	791.4	806.9	806.9	806.9	806.9	822.6	803.2	806.9	806.9	775.7	744.4
57.5°	720.9	736.6	748.3	732.6	748.3	732.6	724.8	720.9	713.0	681.6	634.6
60°	662.1	669.9	666.0	662.1	669.9	658.1	650.3	634.6	626.8	583.7	552.3
62.5°	595.5	599.3	603.3	595.5	587.6	583.7	568.0	544.5	528.8	493.5	466.1
65°	540.5	528.8	524.9	521.0	513.3	501.4	489.8	462.3	450.4	419.2	391.7
67.5°	458.2	454.5	462.3	450.4	431.0	431.0	419.2	395.7	368.2	348.7	321.2
70°	391.7	387.9	380.0	368.2	364.4	348.7	348.7	321.2	313.4	278.1	254.6
72.5°	321.2	321.2	309.4	297.7	285.9	278.1	274.2	254.6	242.9	223.3	203.6
75°	242.9	242.9	238.9	227.1	219.3	211.5	207.6	192.0	180.1	160.7	148.9
77.5°	172.3	172.3	156.8	148.9	152.7	144.8	137.0	133.3	129.2	117.6	101.9
80°	101.9	98.0	86.3	90.1	86.3	86.3	82.3	78.3	70.5	62.7	54.8
82.5°	27.5	31.3	31.3	31.3	35.3	27.5	27.5	27.5	31.3	31.3	19.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0
87.5°	4.0	7.8	15.7	15.7	15.7	15.7	15.7	11.8	11.8	11.8	7.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1
2.5°	3306.4	3302.4	3306.4	3278.9	3341.5	3294.6	3286.8	3278.9	3306.4	3278.9	3239.8
5°	3376.8	3337.7	3325.8	3314.2	3349.3	3294.6	3282.9	3286.8	3267.1	3216.3	3220.2
7.5°	3400.3	3365.2	3329.9	3255.4	3286.8	3275.1	3243.6	3220.2	3188.8	3145.7	3137.9
10°	3408.1	3369.0	3318.0	3294.6	3247.6	3231.9	3220.2	3181.0	3141.8	3067.5	3047.7
12.5°	3384.6	3337.7	3275.1	3255.4	3220.2	3169.2	3141.8	3102.6	3067.5	3008.7	2965.5
15°	3282.9	3243.6	3224.1	3157.5	3141.8	3110.4	3055.6	3000.8	2949.9	2871.5	2848.0
17.5°	3165.3	3149.7	3130.0	3079.1	3075.3	3044.0	2993.0	2945.9	2879.4	2757.8	2718.7
20°	3044.0	3044.0	2981.2	2961.7	3000.8	2938.1	2898.9	2855.8	2718.7	2660.0	2589.5
22.5°	2953.8	2910.7	2875.4	2844.1	2848.0	2808.8	2754.1	2667.8	2616.8	2546.4	2464.1
25°	2777.5	2793.1	2714.9	2703.1	2714.9	2624.7	2597.3	2526.7	2452.3	2385.6	2323.1
27.5°	2667.8	2624.7	2573.8	2530.7	2530.7	2495.4	2417.2	2401.5	2287.8	2225.1	2146.7
30°	2503.2	2471.9	2428.8	2366.2	2358.4	2330.9	2268.3	2229.0	2111.6	2017.5	1974.4
32.5°	2295.6	2283.9	2248.6	2178.1	2154.7	2123.2	2045.0	1978.4	1923.5	1817.6	1766.9
35°	2146.7	2103.8	2029.3	1970.5	1950.9	1896.1	1833.3	1786.3	1727.5	1633.6	1567.0
37.5°	1923.5	1880.4	1809.8	1739.4	1739.4	1684.6	1598.3	1551.3	1469.1	1414.1	1359.4
40°	1727.5	1672.8	1602.3	1520.0	1508.2	1429.8	1394.7	1316.3	1265.3	1179.1	1171.3
42.5°	1508.2	1457.2	1394.7	1331.9	1284.9	1245.8	1155.7	1096.9	1042.1	999.0	987.2
45°	1308.4	1241.8	1187.0	1108.5	1061.7	1014.7	955.9	916.7	873.6	826.7	799.2
47.5°	1136.0	1081.3	1002.9	932.4	885.4	861.8	795.1	752.2	716.9	685.6	666.0
50°	959.8	893.2	850.1	771.6	763.8	709.1	654.3	619.0	599.3	572.0	544.5
52.5°	826.7	763.8	705.1	646.4	615.0	595.5	544.5	509.2	481.9	462.3	446.7
55°	697.3	642.5	595.5	536.7	517.0	489.8	431.0	423.2	395.7	368.2	348.7
57.5°	599.3	548.4	493.5	454.5	419.2	399.7	352.6	321.2	305.6	282.1	262.4
60°	509.2	454.5	411.4	364.4	348.7	321.2	285.9	258.6	238.9	219.3	199.9
62.5°	427.0	380.0	333.0	293.8	270.3	254.6	227.1	203.6	184.2	168.6	152.7
65°	352.6	309.4	270.3	231.1	219.3	199.9	180.1	160.7	144.8	125.4	109.8
67.5°	289.9	250.7	211.5	184.2	172.3	164.5	141.1	121.4	109.8	98.0	82.3
70°	227.1	199.9	168.6	144.8	133.3	121.4	105.8	94.1	78.3	70.5	58.8
72.5°	176.4	152.7	125.4	105.8	98.0	90.1	74.5	62.7	54.8	47.0	39.2
75°	125.4	105.8	90.1	70.5	66.6	62.7	51.0	43.1	35.3	27.5	23.5
77.5°	86.3	70.5	54.8	47.0	43.1	35.3	31.3	23.5	19.6	15.7	11.8
80°	47.0	35.3	27.5	23.5	19.6	15.7	15.7	11.8	7.8	7.8	4.0
82.5°	15.7	11.8	7.8	4.0	4.0	4.0	4.0	4.0	4.0	0.0	4.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1
2.5°	3263.3	3220.2	3231.9	3231.9	3224.1	3224.1	3216.3	3204.5	3208.5	3184.9	3134.0
5°	3228.0	3173.2	3165.3	3173.2	3141.8	3134.0	3118.3	3141.8	3071.2	3098.7	3067.5
7.5°	3126.2	3075.3	3063.4	3090.9	3051.8	3028.1	3024.3	3055.6	2993.0	2961.7	2926.4
10°	3012.4	2993.0	2957.7	2938.1	2926.4	2930.2	2898.9	2859.8	2848.0	2840.1	2808.8
12.5°	2910.7	2867.6	2836.3	2812.8	2804.9	2804.9	2754.1	2746.2	2710.9	2703.1	2656.1
15°	2789.2	2738.4	2718.7	2687.4	2660.0	2675.6	2616.8	2601.2	2589.5	2538.5	2546.4
17.5°	2683.4	2628.6	2581.7	2562.0	2538.5	2515.0	2460.1	2471.9	2444.4	2444.4	2374.0
20°	2546.4	2487.6	2452.3	2413.1	2413.1	2381.9	2342.7	2346.6	2311.3	2276.1	2213.3
22.5°	2401.5	2338.7	2295.6	2280.0	2240.8	2233.0	2186.0	2174.2	2127.2	2131.0	2076.3
25°	2248.6	2186.0	2127.2	2131.0	2095.9	2080.3	2052.8	1998.0	1978.4	1954.9	1939.2
27.5°	2068.5	2025.3	1974.4	1970.5	1903.9	1907.8	1872.6	1856.9	1809.8	1821.6	1786.3
30°	1903.9	1841.2	1794.1	1782.5	1755.1	1747.2	1692.4	1668.8	1676.8	1645.3	1625.8
32.5°	1735.3	1641.5	1621.8	1598.3	1582.7	1563.0	1523.9	1539.5	1504.2	1512.1	1480.7
35°	1512.1	1472.9	1421.9	1421.9	1406.3	1390.7	1363.4	1379.0	1343.7	1328.1	1296.7
37.5°	1324.1	1288.9	1237.9	1253.6	1226.1	1202.6	1179.1	1183.0	1151.7	1147.9	1116.4
40°	1120.3	1100.7	1065.6	1065.6	1046.0	1046.0	1034.2	1022.5	1002.9	979.4	944.1
42.5°	928.4	912.7	897.1	901.0	873.6	897.1	865.7	885.4	822.6	818.8	795.1
45°	787.3	752.2	756.1	740.4	724.8	732.6	705.1	713.0	677.8	669.9	646.4
47.5°	638.6	626.8	603.3	595.5	595.5	583.7	572.0	568.0	552.3	532.7	501.4
50°	524.9	481.9	473.9	462.3	454.5	454.5	438.8	415.3	419.2	399.7	368.2
52.5°	411.4	376.1	360.4	356.5	340.9	333.0	313.4	297.7	285.9	278.1	258.6
55°	317.3	285.9	266.4	266.4	242.9	242.9	215.4	203.6	188.0	172.3	160.7
57.5°	238.9	223.3	203.6	188.0	180.1	160.7	144.8	125.4	113.6	90.1	74.5
60°	180.1	164.5	144.8	133.3	125.4	105.8	86.3	70.5	43.1	35.3	31.3
62.5°	133.3	117.6	98.0	90.1	82.3	66.6	47.0	23.5	11.8	11.8	11.8
65°	98.0	78.3	62.7	54.8	47.0	35.3	15.7	7.8	4.0	4.0	4.0
67.5°	66.6	51.0	35.3	31.3	23.5	11.8	4.0	4.0	4.0	4.0	4.0
70°	43.1	31.3	15.7	11.8	7.8	4.0	4.0	4.0	4.0	4.0	4.0
72.5°	27.5	15.7	7.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	15.7	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P563873

CATALOG NUMBER: LD4C55D010 EX4C559030 4LBSQLWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1	3267.1
2.5°	3188.8	3161.4	3177.0	3141.8	3157.5	3184.9	3165.3	3173.2
5°	3079.1	3063.4	3044.0	2993.0	3032.2	3063.4	3047.7	3044.0
7.5°	2961.7	2906.8	2934.2	2918.6	2910.7	2942.0	2906.8	2945.9
10°	2840.1	2801.0	2797.2	2769.6	2769.6	2793.1	2797.2	2773.5
12.5°	2660.0	2640.4	2640.4	2636.5	2632.5	2656.1	2660.0	2648.3
15°	2530.7	2522.9	2503.2	2499.4	2476.0	2511.1	2515.0	2511.1
17.5°	2374.0	2377.8	2358.4	2358.4	2374.0	2385.6	2354.4	2385.6
20°	2268.3	2248.6	2240.8	2205.5	2225.1	2244.8	2244.8	2248.6
22.5°	2115.4	2084.0	2095.9	2076.3	2064.4	2091.9	2091.9	2103.8
25°	1943.1	1943.1	1950.9	1939.2	1947.0	1962.7	1950.9	1978.4
27.5°	1778.5	1794.1	1794.1	1778.5	1786.3	1833.3	1852.9	1821.6
30°	1625.8	1629.7	1641.5	1633.6	1657.1	1672.8	1668.8	1692.4
32.5°	1453.5	1472.9	1480.7	1469.1	1477.0	1512.1	1492.5	1488.6
35°	1320.2	1284.9	1281.1	1284.9	1300.6	1308.4	1300.6	1328.1
37.5°	1128.2	1116.4	1100.7	1104.8	1116.4	1132.2	1140.1	1159.5
40°	944.1	928.4	928.4	924.5	912.7	955.9	955.9	955.9
42.5°	783.5	779.5	760.1	760.1	775.7	787.3	779.5	806.9
45°	642.5	626.8	615.0	615.0	626.8	626.8	638.6	634.6
47.5°	505.4	489.8	493.5	481.9	493.5	509.2	489.8	493.5
50°	380.0	380.0	372.2	380.0	376.1	380.0	372.2	364.4
52.5°	258.6	293.8	297.7	282.1	246.8	215.4	195.8	211.5
55°	148.9	133.3	133.3	129.2	121.4	117.6	105.8	117.6
57.5°	74.5	66.6	66.6	66.6	62.7	58.8	51.0	51.0
60°	31.3	27.5	27.5	23.5	19.6	15.7	11.8	15.7
62.5°	11.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
65°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
67.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
70°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)